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| 10/520,678 | 01/11/2005 | Valerie Sauvant-Moynot | 612-44548X00 | 9278 |
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| ANTONELLI, TERRY, STOUT & KRAUS, LLP | | | EXAMINER | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/520,678 | Applicant(s) SAUVANT-MOYNOT ET AL. |
| | Examiner Michael J. Feely | Art Unit 1796 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 December 2007.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) 12 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/0256/06)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Pending Claims

Claims 1-20 are pending.

Claim Objections

1. Claim 12 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 2.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The rejection of claims 1-5 under 35 U.S.C. 103(a) as being unpatentable over Camberlin et al. (US Pat. No. 6,239,232) in view of Gasmene (US Pat. No. 5,703,178) stands. New claims 6-20 are also rejected.

Regarding claims 1-20, Camberlin et al. disclose: (1) a composition (Abstract) comprising: at least one thermoplastic polymer selected from the group formed by either polyphenylenes and polysulphones, used alone or as a mixture (Abstract), at least one epoxy

resin modified by at least one aromatic polyamine (Abstract), said resin being formed by at least one polyepoxide containing at least 2 epoxy groups in its molecule and the aromatic polyamine containing at least 2 primary amine groups in its molecule (Abstract), the mole ratio of the polyamine to the epoxy compound being such that each amine group corresponds to 1.6 to 2.6 epoxy groups (Abstract); and at least one filler (column 4, lines 4-6); (10) a combination of a metal support and a coating obtained by applying a composition according to claim 1 to the metal support (column 1; Examples); (11) a pipeline for oilfield exploitation, hydrocarbon transport ore refining fields, comprising a metal pipe and a coating obtained by applying a composition according to claim 1 to the metal pipe (column 1; Examples); and (20) in which the pipeline is immersed in seawater (column 1; Examples).

The prior art reference discloses that the composition is useful for coatings exposed to high-temperature environments (*see column 1*); however, the prior art reference fails to disclose: (1) at least one filler in the form of particles having an anisometric morphology and with a mean dimension in the range of 1 to 250 μm ; (2 & 12) selected from non isometric silicates; (3 & 13) wherein said filler is a micaceous iron oxide; (4 & 14) in which said particles have a form factor, defined as the ratio between their largest dimension and their smallest dimension, in the range of about 5 to 500; (5 & 15) in which the concentration by volume of said particles is in the range of 1% to 50% with respect to the total volume; (6 & 16) in which the concentration by volume of said particles is in the range of 5% to 40% with respect to the total volume; (7 & 17) in which the concentration by volume of said particles is in the range of 10% to 30% with respect to the total volume; (8 & 18) in which the particles have a mean dimension in the range of 1 to 100 μm ; and (9 & 19) in which the particles have a mean dimension in the range of 1 to 50 μm .

Gasmena discloses an epoxy resin composition useful for coatings exposed to high-temperature environments. They further disclose that certain fillers are suitable for these high-temperature environments. These fillers include powders and flakes of (**2 & 12**) non-isometric silicates (*see column 8, lines 53-62*) and (**3 & 13**) micaceous iron oxide (*see column 8, lines 53-62*). Furthermore, they disclose a concentration range overlapping the one set forth in claims (**5-7 & 15-17**) (*see column 9, lines 15-26*).

Gasmena fails to explicitly disclose the form factor set forth in claims (**4 & 14**); however, this form factor appears to be an inherent characteristic of the fillers taught by Gasmena, particularly the micaceous iron oxide and magnesium silicate (talc).

Gasmena also fails to explicitly disclose the mean particle size set forth in claims (**1, 8, 9, 18 & 19**). However, one of ordinary skill in the art would have recognized that mean particle size of filler is a result-effective variable, wherein particle size is optimized to provide ease in processing (*dispersion*) and desired point-to-point contact of the filler dispersed within the composition. In light of this, it has been found that, “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation,” – *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); and, “a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation,” – *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the filler of the instant invention, as taught by Gasmena, to the composition of

Camberlin et al. because Gasmena disclose that these fillers, including magnesium silicate (talc) and micaceous iron oxide, are recognized in the art as suitable fillers for epoxy coating compositions exposed to high-temperature environments.

4. The rejection of claims 1-5 under 35 U.S.C. 103(a) as being unpatentable over Camberlin et al. (US Pat. No. 6,349,747) in view of Gasmena (US Pat. No. 5,703,178) stands. New claims 6-20 are also rejected.

Regarding claims 1-5, Camberlin et al. disclose: **(I)** a composition (Abstract; claims 1-18) comprising: at least one thermoplastic polymer selected from the group formed by ether polyphenylenes and polysulphones, used alone or as a mixture (Abstract; claims 1-18), at least one epoxy resin modified by at least one aromatic polyamine (Abstract; claims 1-18), said resin being formed by at least one polyepoxide containing at least 2 epoxy groups in its molecule and the aromatic polyamine containing at least 2 primary amine groups in its molecule (Abstract; claims 1-18), the mole ratio of the polyamine to the epoxy compound being such that each amine group corresponds to 1.6 to 2.6 epoxy groups (Abstract; claims 1-18); and at least one filler (column 4, lines 14-16) ; **(10)** a combination of a metal support and a coating obtained by applying a composition according to claim 1 to the metal support (column 1; Examples); **(11)** a pipeline for oilfield exploitation, hydrocarbon transport ore refining fields, comprising a metal pipe and a coating obtained by applying a composition according to claim 1 to the metal pipe (column 1; Examples); and **(20)** in which the pipeline is immersed in seawater (column 1; Examples).

The prior art reference discloses that the composition is useful for coatings exposed to high-temperature environments (*see column 1*); however, the prior art reference fails to disclose: **(1)** at least one filler in the form of particles having an anisometric morphology and with a mean dimension in the range of 1 to 250 μm ; **(2 & 12)** selected from non isometric silicates; **(3 & 13)** wherein said filler is a micaceous iron oxide; **(4 & 14)** in which said particles have a form factor, defined as the ratio between their largest dimension and their smallest dimension, in the range of about 5 to 500; **(5 & 15)** in which the concentration by volume of said particles is in the range of 1% to 50% with respect to the total volume; **(6 & 16)** in which the concentration by volume of said particles is in the range of 5% to 40% with respect to the total volume; **(7 & 17)** in which the concentration by volume of said particles is in the range of 10% to 30% with respect to the total volume; **(8 & 18)** in which the particles have a mean dimension in the range of 1 to 100 μm ; and **(9 & 19)** in which the particles have a mean dimension in the range of 1 to 50 μm .

Gasmena discloses an epoxy resin composition useful for coatings exposed to high-temperature environments. They further disclose that certain fillers are suitable for these high-temperature environments. These fillers include powders and flakes of **(2 & 12)** non-isometric silicates (*see column 8, lines 53-62*) and **(3 & 13)** micaceous iron oxide (*see column 8, lines 53-62*). Furthermore, they disclose a concentration range overlapping the one set forth in claims **(5-7 & 15-17)** (*see column 9, lines 15-26*).

Gasmena fails to explicitly disclose the form factor set forth in claims **(4 & 14)**; however, this form factor appears to be an inherent characteristic of the fillers taught by Gasmena, particularly the micaceous iron oxide and magnesium silicate (talc).

Gasmena also fails to explicitly disclose the mean particle size set forth in claims (*1, 8, 9, 18 & 19*). However, one of ordinary skill in the art would have recognized that mean particle size of filler is a result-effective variable, wherein particle size is optimized to provide ease in processing (*dispersion*) and desired point-to-point contact of the filler dispersed within the composition. In light of this, it has been found that, “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation,” – *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); and, “a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation,” – *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the filler of the instant invention, as taught by Gasmena, to the composition of Camberlin et al. because Gasmena disclose that these fillers, including magnesium silicate (talc) and micaceous iron oxide, are recognized in the art as suitable fillers for epoxy coating compositions exposed to high-temperature environments.

5. The rejection of claims 1-5 under 35 U.S.C. 103(a) as being obvious over Camberlin et al. (US Pat. No. 6,548,608) in view of Gasmena (US Pat. No. 5,703,178) stands. New claims 6-20 are also rejected.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C.

102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C.

103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claims 1-5, Camberlin et al. disclose: *(1)* a composition (Abstract; claims 1-19) comprising: at least one thermoplastic polymer selected from the group formed by ether polyphenylenes and polysulphones, used alone or as a mixture (Abstract; claims 1-19), at least one epoxy resin modified by at least one aromatic polyamine (Abstract; claims 1-19), said resin being formed by at least one polyepoxide containing at least 2 epoxy groups in its molecule and the aromatic polyamine containing at least 2 primary amine groups in its molecule (Abstract; claims 1-19), the mole ratio of the polyamine to the epoxy compound being such that each amine group corresponds to 1.6 to 2.6 epoxy groups (Abstract; claims 1-19); and at least one filler (column 4, lines 20-23) ; *(10)* a combination of a metal support and a coating obtained by applying a composition according to claim 1 to the metal support (column 1; Examples); *(11)* a pipeline for oilfield exploitation, hydrocarbon transport ore refining fields, comprising a metal

pipe and a coating obtained by applying a composition according to claim 1 to the metal pipe (column 1; Examples); and (20) in which the pipeline is immersed in seawater (column 1; Examples).

The prior art reference discloses that the composition is useful for coatings exposed to high-temperature environments (*see column 1*); however, the prior art reference fails to disclose: (1) at least one filler in the form of particles having an anisometric morphology and with a mean dimension in the range of 1 to 250 μm ; (2 & 12) selected from non isometric silicates; (3 & 13) wherein said filler is a micaceous iron oxide; (4 & 14) in which said particles have a form factor, defined as the ratio between their largest dimension and their smallest dimension, in the range of about 5 to 500; (5 & 15) in which the concentration by volume of said particles is in the range of 1% to 50% with respect to the total volume; (6 & 16) in which the concentration by volume of said particles is in the range of 5% to 40% with respect to the total volume; (7 & 17) in which the concentration by volume of said particles is in the range of 10% to 30% with respect to the total volume; (8 & 18) in which the particles have a mean dimension in the range of 1 to 100 μm ; and (9 & 19) in which the particles have a mean dimension in the range of 1 to 50 μm .

Gasmena discloses an epoxy resin composition useful for coatings exposed to high-temperature environments. They further disclose that certain fillers are suitable for these high-temperature environments. These fillers include powders and flakes of (2 & 12) non-isometric silicates (*see column 8, lines 53-62*) and (3 & 13) micaceous iron oxide (*see column 8, lines 53-62*). Furthermore, they disclose a concentration range overlapping the one set forth in claims (5-7 & 15-17) (*see column 9, lines 15-26*).

Gasmena fails to explicitly disclose the form factor set forth in claims (*4 & 14*); however, this form factor appears to be an inherent characteristic of the fillers taught by Gasmena, particularly the micaceous iron oxide and magnesium silicate (talc).

Gasmena also fails to explicitly disclose the mean particle size set forth in claims (*1, 8, 9, 18 & 19*). However, one of ordinary skill in the art would have recognized that mean particle size of filler is a result-effective variable, wherein particle size is optimized to provide ease in processing (*dispersion*) and desired point-to-point contact of the filler dispersed within the composition. In light of this, it has been found that, “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation,” – *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); and, “a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation,” – *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the filler of the instant invention, as taught by Gasmena, to the composition of Camberlin et al. because Gasmena disclose that these fillers, including magnesium silicate (talc) and micaceous iron oxide, are recognized in the art as suitable fillers for epoxy coating compositions exposed to high-temperature environments.

6. The rejection of claims 1-5 under 35 U.S.C. 103(a) as being obvious over Camberlin et al. (US Pat. No. 6,612,343) in view of Gasmena (US Pat. No. 5,703,178) stands. New claims 6-20 are also rejected.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claims 1-5, Camberlin et al. disclose: (**I**) a composition (Abstract; claims 1-23) comprising: at least one thermoplastic polymer selected from the group formed by ether polyphenylenes and polysulphones, used alone or as a mixture (Abstract; claims 1-23), at least one epoxy resin modified by at least one aromatic polyamine (Abstract; claims 1-23), said resin being formed by at least one polyepoxide containing at least 2 epoxy groups in its molecule and the aromatic polyamine containing at least 2 primary amine groups in its molecule (Abstract;

claims 1-23), the mole ratio of the polyamine to the epoxy compound being such that each amine group corresponds to 1.6 to 2.6 epoxy groups (Abstract; claims 1-23); and at least one filler (column 4, lines 2-4) ; (*10*) a combination of a metal support and a coating obtained by applying a composition according to claim 1 to the metal support (column 1; Examples); (*11*) a pipeline for oilfield exploitation, hydrocarbon transport or refining fields, comprising a metal pipe and a coating obtained by applying a composition according to claim 1 to the metal pipe (column 1; Examples); and (*20*) in which the pipeline is immersed in seawater (column 1; Examples).

The prior art reference discloses that the composition is useful for coatings exposed to high-temperature environments (*see column 1*); however, the prior art reference fails to disclose: (*1*) at least one filler in the form of particles having an anisometric morphology and with a mean dimension in the range of 1 to 250 μm ; (*2 & 12*) selected from non isometric silicates; (*3 & 13*) wherein said filler is a micaceous iron oxide; (*4 & 14*) in which said particles have a form factor, defined as the ratio between their largest dimension and their smallest dimension, in the range of about 5 to 500; (*5 & 15*) in which the concentration by volume of said particles is in the range of 1% to 50% with respect to the total volume; (*6 & 16*) in which the concentration by volume of said particles is in the range of 5% to 40% with respect to the total volume; (*7 & 17*) in which the concentration by volume of said particles is in the range of 10% to 30% with respect to the total volume; (*8 & 18*) in which the particles have a mean dimension in the range of 1 to 100 μm ; and (*9 & 19*) in which the particles have a mean dimension in the range of 1 to 50 μm .

Gasmena discloses an epoxy resin composition useful for coatings exposed to high-temperature environments. They further disclose that certain fillers are suitable for these high-temperature environments. These fillers include powders and flakes of (*2 & 12*) non-isometric

silicates (*see column 8, lines 53-62*) and (**3 & 13**) micaceous iron oxide (*see column 8, lines 53-62*). Furthermore, they disclose a concentration range overlapping the one set forth in claims (**5-7 & 15-17**) (*see column 9, lines 15-26*).

Gasmena fails to explicitly disclose the form factor set forth in claims (**4 & 14**); however, this form factor appears to be an inherent characteristic of the fillers taught by Gasmena, particularly the micaceous iron oxide and magnesium silicate (talc).

Gasmena also fails to explicitly disclose the mean particle size set forth in claims (**1, 8, 9, 18 & 19**). However, one of ordinary skill in the art would have recognized that mean particle size of filler is a result-effective variable, wherein particle size is optimized to provide ease in processing (*dispersion*) and desired point-to-point contact of the filler dispersed within the composition. In light of this, it has been found that, “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation,” – *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); and, “a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation,” – *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the filler of the instant invention, as taught by Gasmena, to the composition of Camberlin et al. because Gasmena disclose that these fillers, including magnesium silicate (talc) and micaceous iron oxide, are recognized in the art as suitable fillers for epoxy coating compositions exposed to high-temperature environments.

7. The rejection of claims 1-5 under 35 U.S.C. 103(a) as being obvious over Sauvant-Moynot et al. (US Pat. No. 7,049,349) stands. New claims 6-20 are also rejected.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claims 1-5, Sauvant-Moynot et al. disclose: (1) a composition (Abstract; claims 1-19) comprising: at least one thermoplastic polymer selected from the group formed by ether polyphenylenes and polysulphones, used alone or as a mixture (Abstract; claims 1-19), at least one epoxy resin modified by at least one aromatic polyamine (Abstract; claims 1-19), said resin being formed by at least one polyepoxide containing at least 2 epoxy groups in its molecule and the aromatic polyamine containing at least 2 primary amine groups in its molecule (Abstract;

claims 1-19), the mole ratio of the polyamine to the epoxy compound being such that each amine group corresponds to 1.6 to 2.6 epoxy groups (Abstract; claims 1-19); and at least one filler (column 4, liens 17-28); (10) a combination of a metal support and a coating obtained by applying a composition according to claim 1 to the metal support (column 1); (11) a pipeline for oilfield exploitation, hydrocarbon transport or refining fields, comprising a metal pipe and a coating obtained by applying a composition according to claim 1 to the metal pipe (column 1); and (20) in which the pipeline is immersed in seawater (column 1).

The prior art reference discloses that the composition is useful for coatings exposed to high-temperature environments (*see column 1*); however, the prior art reference fails to disclose: (1) at least one filler in the form of particles having an anisometric morphology and with a mean dimension in the range of 1 to 250 μm ; (2 & 12) selected from non isometric silicates; (3 & 13) wherein said filler is a micaceous iron oxide; (4 & 14) in which said particles have a form factor, defined as the ratio between their largest dimension and their smallest dimension, in the range of about 5 to 500; (5 & 15) in which the concentration by volume of said particles is in the range of 1% to 50% with respect to the total volume; (6 & 16) in which the concentration by volume of said particles is in the range of 5% to 40% with respect to the total volume; (7 & 17) in which the concentration by volume of said particles is in the range of 10% to 30% with respect to the total volume; (8 & 18) in which the particles have a mean dimension in the range of 1 to 100 μm ; and (9 & 19) in which the particles have a mean dimension in the range of 1 to 50 μm .

Gasmena discloses an epoxy resin composition useful for coatings exposed to high-temperature environments. They further disclose that certain fillers are suitable for these high-temperature environments. These fillers include powders and flakes of (2 & 12) non-isometric

Art Unit: 1796

silicates (*see column 8, lines 53-62*) and (**3 & 13**) micaceous iron oxide (*see column 8, lines 53-62*). Furthermore, they disclose a concentration range overlapping the one set forth in claims (**5-7 & 15-17**) (*see column 9, lines 15-26*).

Gasmena fails to explicitly disclose the form factor set forth in claims (**4 & 14**); however, this form factor appears to be an inherent characteristic of the fillers taught by Gasmena, particularly the micaceous iron oxide and magnesium silicate (talc).

Gasmena also fails to explicitly disclose the mean particle size set forth in claims (**1, 8, 9, 18 & 19**). However, one of ordinary skill in the art would have recognized that mean particle size of filler is a result-effective variable, wherein particle size is optimized to provide ease in processing (*dispersion*) and desired point-to-point contact of the filler dispersed within the composition. In light of this, it has been found that, “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation,” – *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); and, “a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation,” – *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the filler of the instant invention, as taught by Gasmena, to the composition of Sauvant-Moynot et al. because Gasmena disclose that these fillers, including magnesium silicate (talc) and micaceous iron oxide, are recognized in the art as suitable fillers for epoxy coating compositions exposed to high-temperature environments.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,349,747 in view of Gasmena (US Pat. No. 5,703,178). The claims are obvious for the reason set forth above in section 4.

10. Claims 1-9 and 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,548,608 in view of Gasmena (US Pat. No. 5,703,178). The claims are obvious for the reason set forth above in section 5.

11. Claims 1-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,612,343 in view of

Gasmena (US Pat. No. 5,703,178). The claims are obvious for the reason set forth above in section 6.

12. Claims 1-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 7,049,349 in view of Gasmena (US Pat. No. 5,703,178). The claims are obvious for the reason set forth above in section 7.

Response to Arguments

13. Applicant's arguments filed August 31, 2007 have been fully considered but they are not persuasive.

Applicant argues that Gasmena et al. do not differentiate between anisometric fillers and isometric fillers. In light of this, they point to unexpected results when using anisometric fillers (vs. isometric fillers).

It is true that Gasmena et al. disclose a list of fillers. However, it should be noted that most, if not all, of their *preferred* fillers (*see column 8 lines 59-62*) are anisometric in nature. The use of these preferred materials would have led to the same results discussed by the applicant. These properties would have flowed naturally from the materials of the obvious composition(s).

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is (571)272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J Feely/
Primary Examiner, Art Unit 1796

February 18, 2007